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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,965

04/25/2006

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EXAMINER

KILPATRICK, BRYAN T

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

12/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,965	Applicant(s) HOSHINO ET AL.	
	Examiner BRYAN T. KILPATRICK	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments and arguments/remarks filed on 10 September 2009 have been entered and fully considered.
2. Instant claims 1 and 8-11 have been amended by Applicant's amendment filed on 10 September 2009.
3. The terminal disclaimer filed on 10 September 2009 has been entered and fully considered; therefore, the double patenting rejection in light of U.S. Patent No. 7,391,546 (Hoshino et al.) has been withdrawn.

Terminal Disclaimer

The terminal disclaimer filed on 10 September 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 7,391,546 (Hoshino et al.) has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Objections

Claim 10 is objected to because of the following informalities: the claim recites a discrimination apparatus comprising an optical filter and light detector, but fails to state the use of a light source. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent 1,028,359 A1 (SHIOZAWA et al.).

In regards to instant claim 1, SHIOZAWA et al. discloses an authenticity film having circular polarized light selectivity in the Abstract. Paragraphs [0030]-[0041] of SHIOZAWA et al. disclose the use of cholesteric liquid layers to make films having multiple layers that are shown to be stack upon each other in Fig. 1. SHIOZAWA et al. discloses in Fig. 4(A) a reflective film 11 between protective layer 12 and light absorbing layer 13 that reflects either right or left-handed circularly polarized light - film 11 reflects light at the interface with layer 12 and at surface 11a, which is at the interface of layer 13.

Since it is well known in the art that an interface is defined as a common boundary of two objects (see online article for definition of "interface"), it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the authenticity film of SHIOZAWA et al. as a discrimination medium since the authenticity film of SHIOZAWA et al. employs multi-layered films that "may be any one of mediums having optical selective reflectivity and circularly polarized light selectivity"

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(paragraph [0033] of SHIOZAWA et al.) for authenticity identifying (Abstract of SHIOZAWA et al.).

Instant claims 2 and 3 recite reflections of light off the cholesteric liquid crystal layer and multilayer film; approximately equal to each other in color for instant claim 2 and different from each other in color for instant claim 3, respectively. SHIOZAWA et al. discloses selective refractivity to reflect light in a specific waveband more strongly than light of a wavelength in other wavebands, as well as reflecting different polarized lights in paragraphs [0043]-[0045]. SHIOZAWA et al. discloses a method of producing a hologram (which the prior art defines as a pattern, image, or characters in the first line of paragraph [0062]) on an authenticity identifying film comprised of multiple layers: a reflective film (which has a cholesteric liquid crystal layer or phase), a protective film, a light absorbing film, and a base film in paragraphs [0046]-[0057].

Instant claim 4 requires a figure to be provided to at least a portion of one of the layer and film. Instant claim 5 requires hologram working or embossing. Instant claim 6 requires interlayer peeling structure or a peeling breaking structure. Instant claim 7 requires an article to be discriminated having the discrimination medium. Paragraph [0003] of SHIOZAWA et al. discloses the use of characters and patterns similar to the figures and characters stated by the current instant specification in paragraph [0003]. Paragraphs [0012]-[0013] of SHIOZAWA et al. disclose an embossed hologram and an authenticity identifying film attached to an article via an adhesive layer. Paragraph

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[0099] of SHIOZAWA et al. discloses the use of a form of peeling breaking for preventing the reuse of a discrimination medium.

Instant claims 8-11 discloses either a method or apparatus for discriminating a discrimination medium that uses a discrimination medium comprised of films having multiple layers being analyzed by a device having an optical filter, a light irradiation device, and a light detector.

The Abstract, paragraphs [0019]-[0022], and paragraphs [0085]-[0091] of SHIOZAWA et al. disclose the use of these type of components in a system for authenticity identification which uses multi-layered films that “may be any one of mediums having optical selective reflectivity and circularly polarized light selectivity” (paragraph [0033] of SHIOZAWA et al.). As previously stated above, SHIOZAWA et al. discloses in Fig. 4(A) a reflective film 11 between protective layer 12 and light absorbing layer 13 that reflects either right or left-handed circularly polarized light - film 11 reflects light at the interface with layer 12 and at surface 11a, which is at the interface of layer 13.

Response to Arguments

Applicant's arguments/remarks filed 10 September 2009 have been fully considered but they are not persuasive.

Applicant states on p. 8-11 of the remarks that SHIOZAWA et al. does not disclose: 1.) a discrimination medium comprising a cholesteric liquid crystal layer that selectively reflects light having a specific wavelength and polarization, and transmit light having a different wavelength and polarization; and 2.) a multilayer film that reflects light transmitted by the cholesteric liquid crystal layer as a second reflection light.

As previously stated, SHIOZAWA et al. discloses an authenticity film having circular polarized light selectivity in the Abstract. Paragraphs [0030]-[0041] of SHIOZAWA et al. disclose the use of cholesteric liquid layers to make films having multiple layers that are shown to be stack upon each other in Fig. 1. SHIOZAWA et al. discloses in Fig. 4(A) a reflective film 11 between protective layer 12 and light absorbing layer 13 that reflects either right or left-handed circularly polarized light - film 11 reflects light at the interface with layer 12 and at surface 11a, which is at the interface of layer 13. In addition, SHIOZAWA et al. discloses selective refractivity to reflect light in a specific waveband more strongly than light of a wavelength in other wavebands, as well as reflecting different polarized lights in paragraphs [0043]-[0045].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN T. KILPATRICK whose telephone number is (571)270-5553. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. T. K./
Examiner, Art Unit 1797

/Samuel P Siefke/
Primary Examiner, Art Unit 1797